

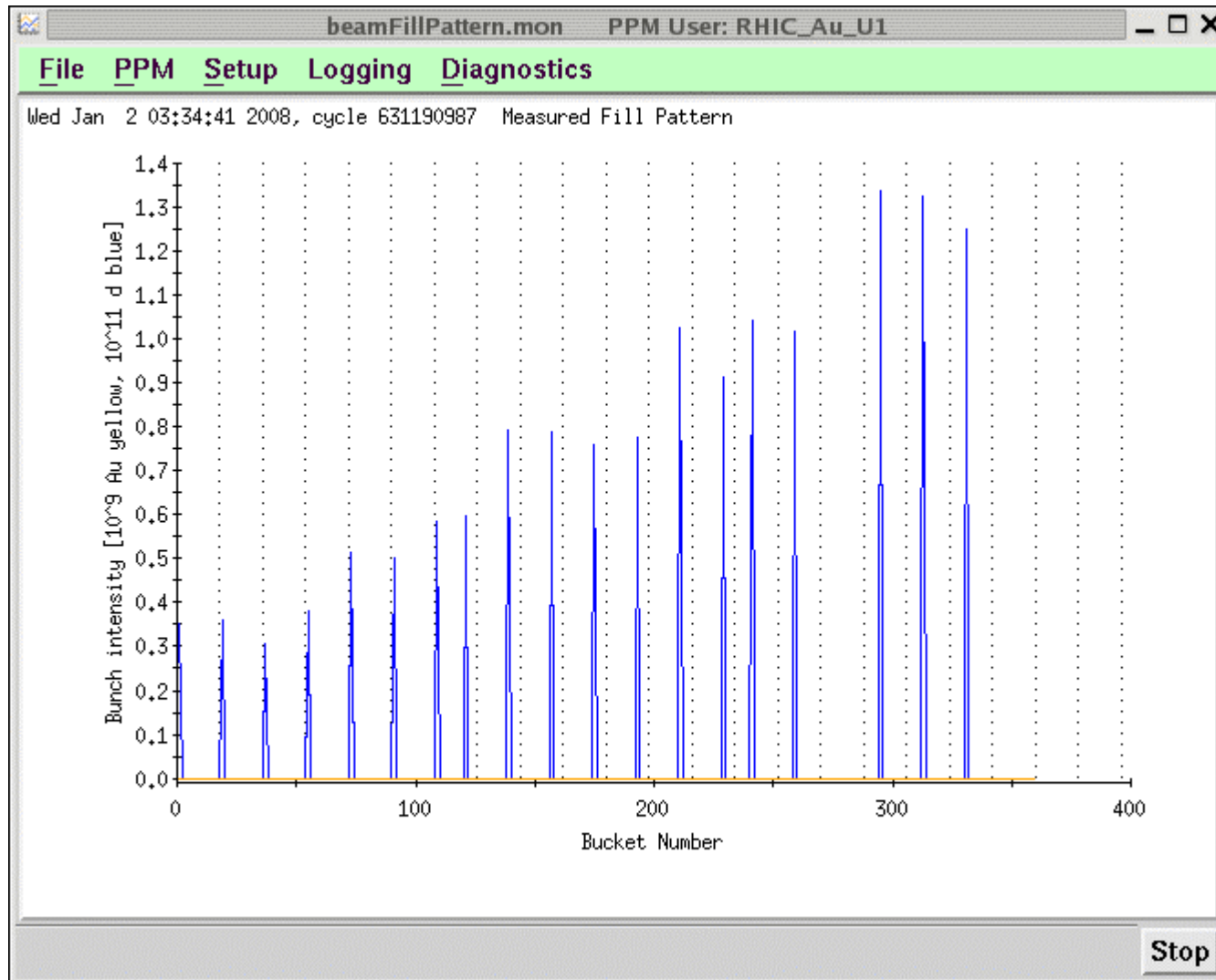
# Transition instability

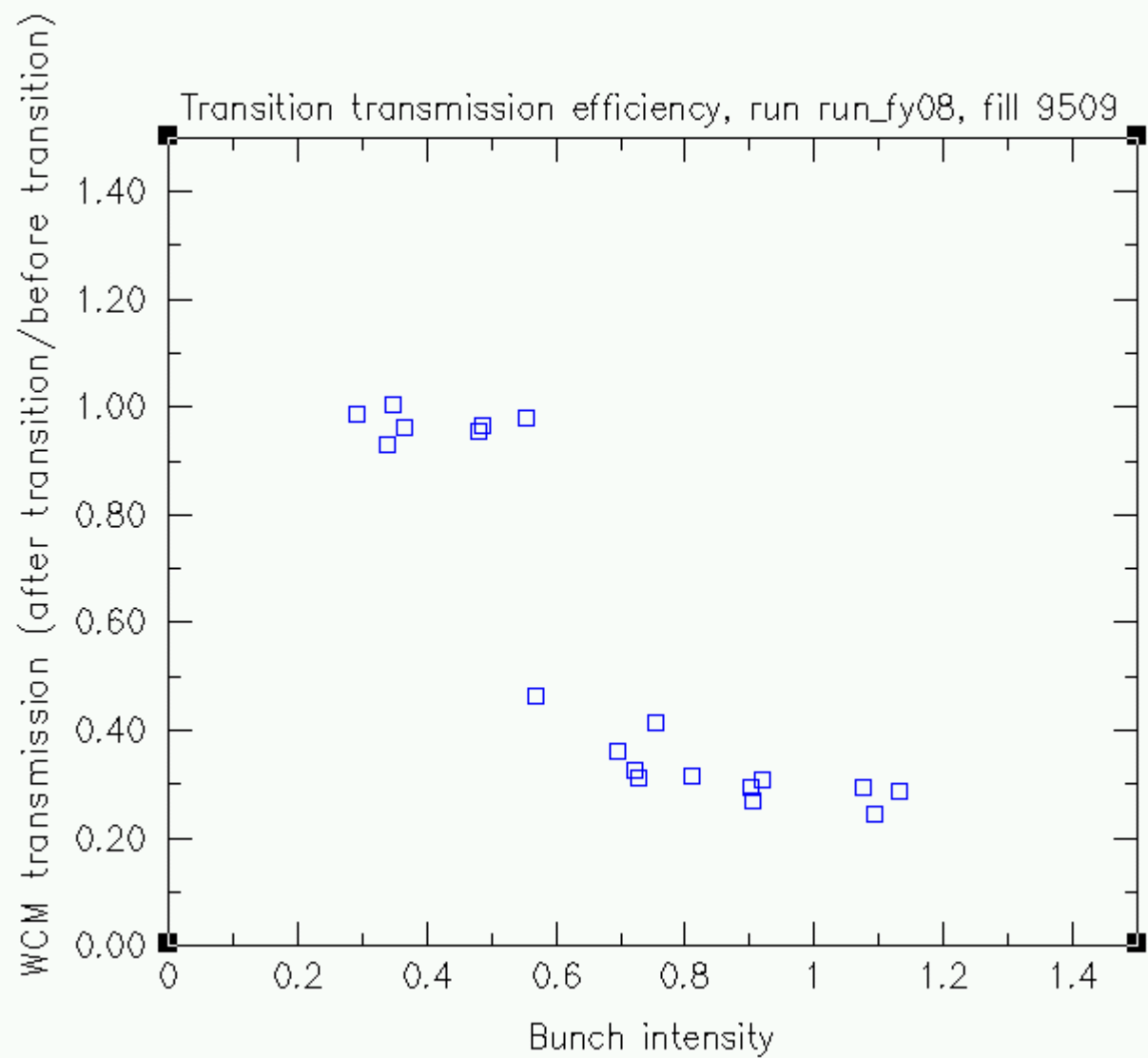
Roger Lee, Wolfram, Vadim

Three ramps. Though third ramp was not quite useful.

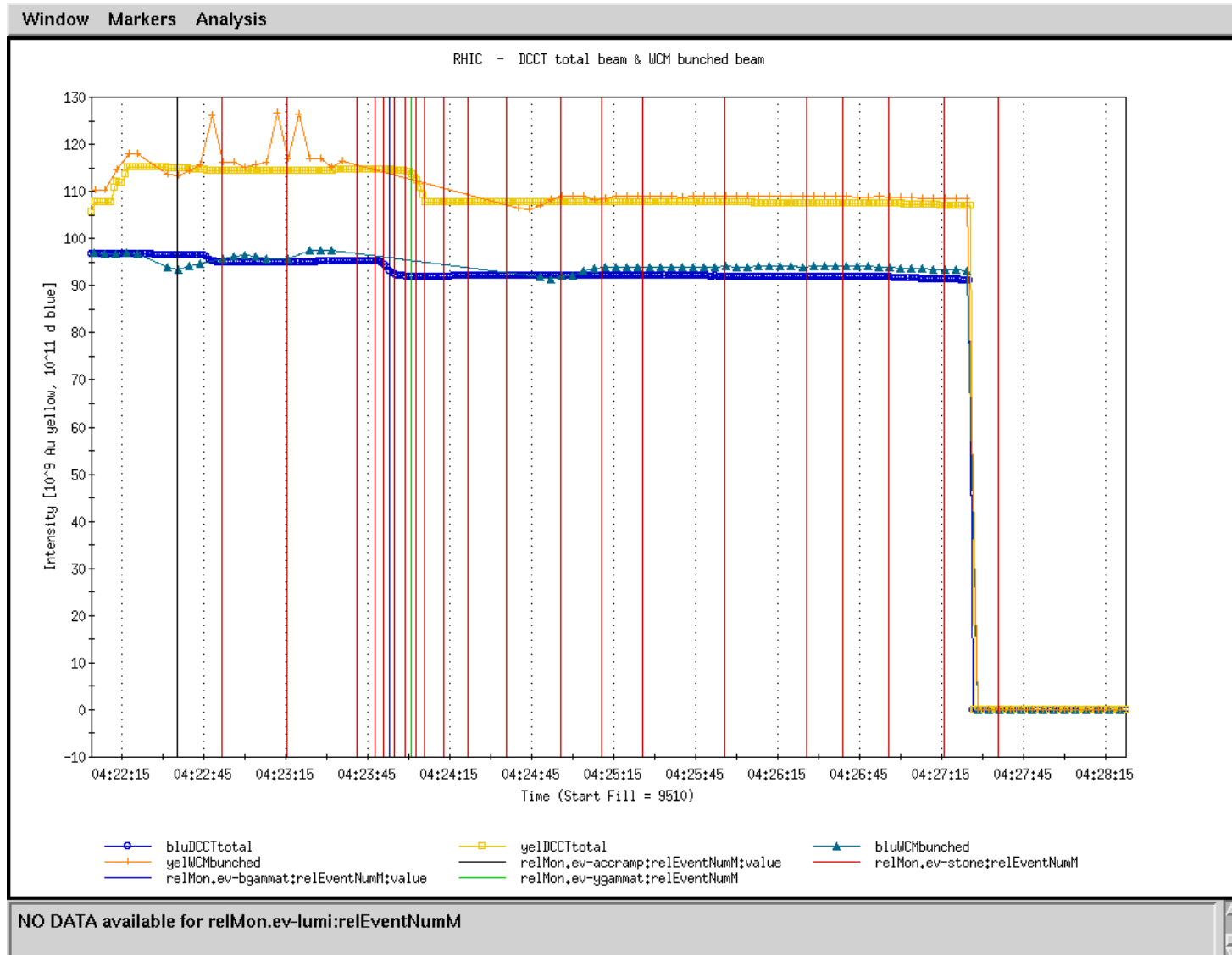
- First ramp. Data for the instability threshold without EC (for Wolfram)
- Other two ramps: 111 bunches.
- Total Blue intensity, the same as in operation.
- Yellow bunch intensity the same as in operation
- Goals:
  - to check the transition instability dependences on total intensity, bunch intensity, bunch number.
  - verify electron cloud simulation results from Wolfram
  - see if 111 bunches can be used in the operation to improve the luminosity

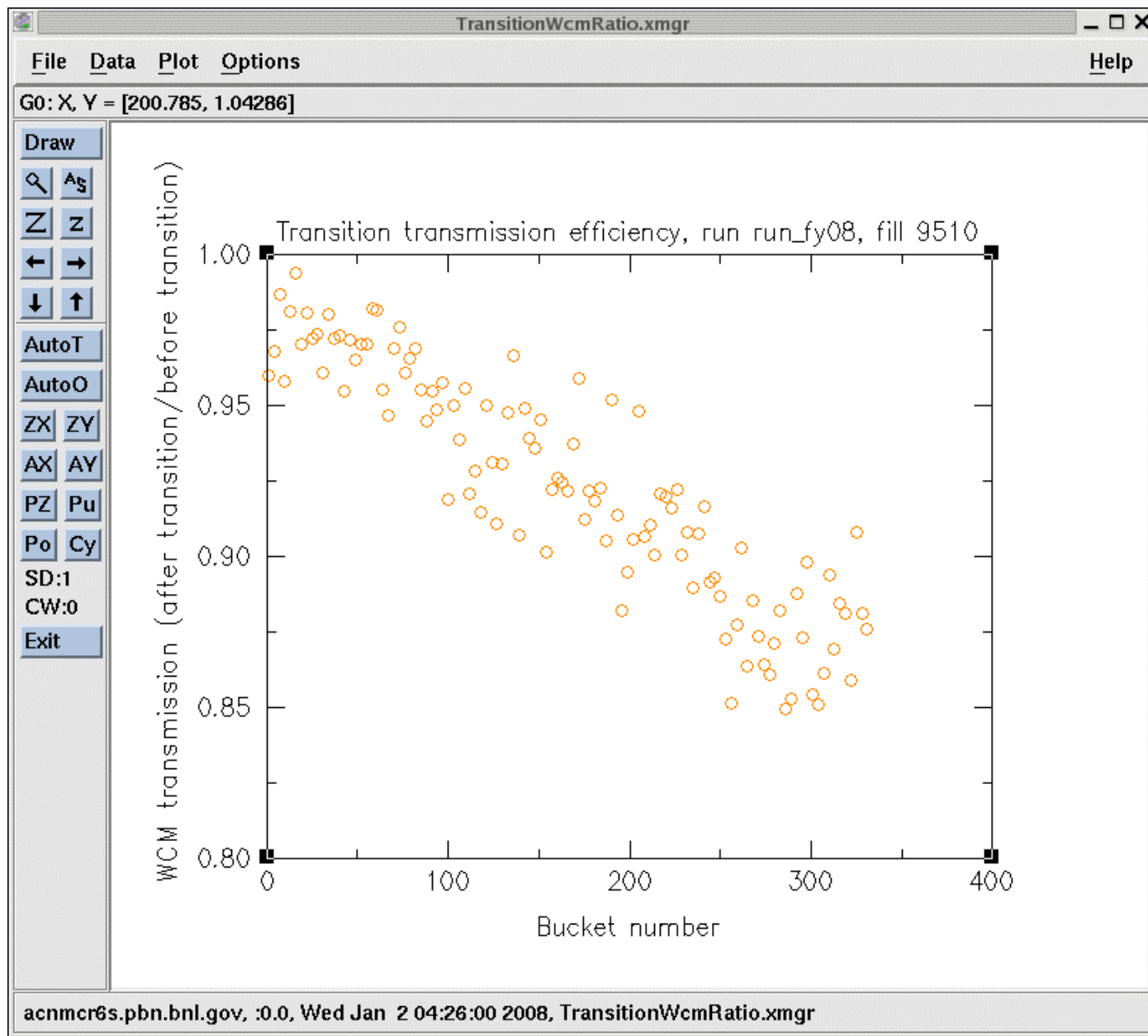
No octupoles; 19 Blue (only) bunches of different intensity





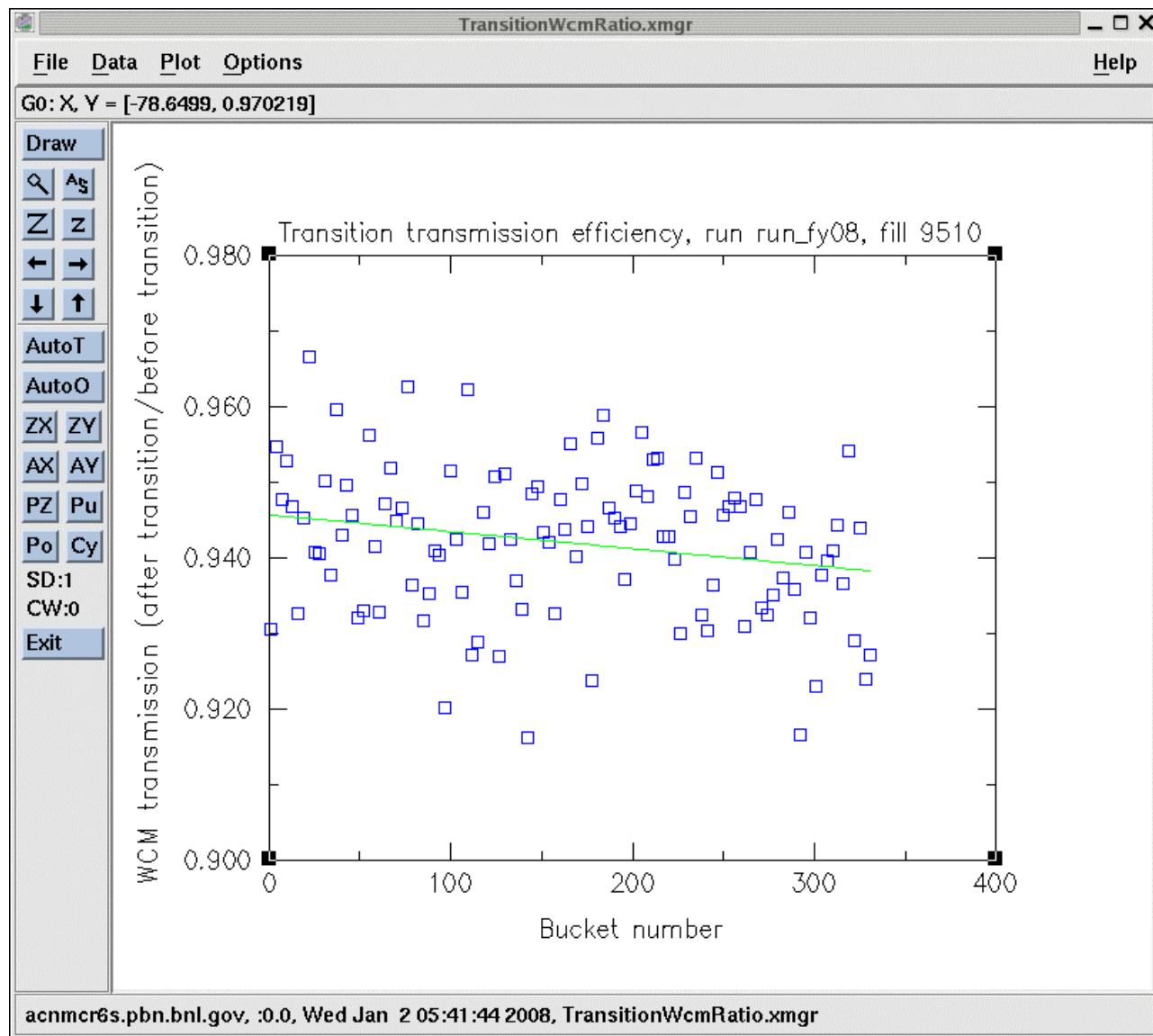
Ramp 9510; 111 bunches;  $\sim 0.91e11$  in Blue,  $1e9$  in Yellow





No transmission deterioration on average

Though slight dependence of the losses on bunch position is seen



Ramp 9511; 111 bunches;  
increased octupoles (by one unit)  
lower by 20% Yellow intensity (injector/ATR problems)

